

CLAIMS

1. A fuel cell stack comprising:
 - a plurality of stacked unit cells;
 - a collector plate disposed at an end of the stacked unit cells in a stacking direction thereof; and
 - an output terminal for drawing current which is connected to the collector plate, characterised in that
the collector plate is made such that a heat capacity per unit area thereof is different for a neighboring region that is near to a portion where the output terminal is connected as compared to other regions of the collector plate, and the heat capacity per unit area of the other regions is smaller than the heat capacity per unit area of the neighboring region.

2. A fuel cell stack according to claim 1, wherein

the collector plate is made such that a volume per unit area thereof is different for a neighboring region that is near to a portion where the output terminal is connected as compared to other regions of the collector plate, and the volume per unit area of the other regions is smaller than the volume per unit area of the neighboring region.

3. The fuel cell stack according to claim 2, wherein

the collector plate is less thick in the other regions than in the neighboring region.

4. The fuel cell stack according to claim 2, wherein

the collector plate is provided with a plurality of holes formed in the thickness direction of the collector plate, and the area of the holes per unit area of the collector plate in the other regions is larger than the area of the holes per unit area in the neighboring region.

5. The fuel cell stack according to claim 4, wherein

the diameter of the holes in the other regions is larger than the diameter of the holes in the neighboring region.

6. The fuel cell stack according to claim 4, wherein

the number of the holes per unit area in the other regions is larger than the number of the holes per unit area in the neighboring region.

7. The fuel cell stack according to claim 2, further comprising:

an end unit cell including a separator in which gas passages are formed, the separator being integrally formed with the collector plate, wherein

at least one of a depth and a width of the gas passages in the other regions of the separator are formed to be larger than a corresponding one of a depth and a width of the gas passages in the neighboring region of the separator.